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EXAMINER

BELIVEAU, SCOTT E

ART UNIT PAPER NUMBER

2614

7

DATE MAILED: 05/20/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/716,682

Applicant(s)

PETERKA, PETR

Examiner

Scott Beliveau

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments, filed 30 April 2004, with respect to the rejection(s) of claim(s) 1-3, 7, 9, 11, 14, 15, and 17 under Thrift et al., in view of Gong and in further view of Anand et al. have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of the previously presented combination of references and a different interpretation of the claims.
2. Applicant's arguments filed 30 April 2004 have been fully considered but they are not persuasive with respect to the previously presented rejections of Ellis et al. in view of McRae and Thrift et al., in view of Gong and in further view of Ahmad.

Rejection over Ellis et al. in view of McRae

With respect to applicant's remarks with respect to Ellis et al. in view of McRae, the examiner respectfully disagrees. In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). The Ellis et al. reference is directed towards the usage of controlling how applications [58/60/62/64] are run at the terminal [22] in so far as the applications are provided with restricted access to device resources [66]. For example, a parent may decide to restrict access to a promotional channel in conjunction with an "interactive promotional channel application" [62]. Applicant's specification discloses that the security policy and associated

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conditions are suitable for use in conjunction with parental control functions and may further be established by the end user (IA: Page 6, Lines 17-19, 29-31). Accordingly, applicant's arguments that the present invention is different with respect to the rating control scheme being established by the network provider as opposed to the end user is not persuasive.

The McRae reference provides further details as to how a parental control application is operable to utilize information based on the "current state of the receiver" in connection with parental controls. In particular, the embodiment is operable to define time criteria and based on the current time or state of the receiver in which the user wishes to access a tuning resource to a potentially restricted channel, the user may or may not be able to access or tune to a particular channel. Independent claims 1 and 17 are not particularly limited to applicant's embodiments wherein particular applications execute on some channels but not on others instant application appears to disclose a similar scenario (IA: Page 28, Lines 17-27).

Rejection over Thrift et al., in view of Gong and in further view of Ahmad

With respect to applicant's remarks differentiating between the applicant's interpretation of the usage of "static" permissions in conjunction with Gong as opposed to the usage of "dynamic permissions" vis-à-vis the instant application, claim 1 is not limiting with respect to particular nature of the condition as set forth in subsequent dependent claims. Rather, a "condition" in conjunction with steps (a) – (d) may be broadly construed as a condition associated with a permission. For example, the permission associated with a bank withdrawal specifies a maximum transaction. Accordingly, the permission is conditional

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based on the condition that the user is not trying to withdraw more than a particular amount of money (If amount is less than maximum transaction then grant the permission). As noted in the prior action, however, this scenario is not related to a current state of the receiver per se and as such the Ahmad reference was relied upon for the teaching of this limitation.

In response to applicant's argument that Ahmad is nonanalogous art, it has been held that a prior art reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention. See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In this case, both the instant application and the Ahmad are both in the same field of endeavor namely the use of security policies in conjunction with downloaded applications. The Ahmad reference teaches that the problems associated with downloadable software applications are similar to those associated with the television environment. Furthermore, it was well established in the art at the time the invention was made that digital television receivers are essentially a form of computer that executes software applications as further supported by applicant's admitted prior art (IA: Page 1, Lines 22-27).

Furthermore, in response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). For example, when taken in combination the references would provide a method wherein a user may download an interactive Java™ applet to their television receiver on a rental basis wherein

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the security policy may defines application resource conditions to access resource functions (Gong et al.) that are only allowed pending the current state of the receiver as defined by the terms and conditions of the rental of the software application.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-6, 8, 10, 12, 13, 16, and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ellis et al. (US Pat No. 6,665,869) in view of McRae (US Pat No.

In consideration of claims 1 and 17, the Ellis et al. reference discloses a “security method” for controlling access to a “function” of a “digital television receiver” [24]. The method involves “providing a software application” [58/60/62/64] that are “executable in response to an execution command”. Using the parental control resource [68a], the user is operable to “provide data defining a condition under which access to the receiver function by the software application is permitted” (Col 6, Lines 23-24). Subsequently, a “control signal for requesting access to the receiver function” [68f] such as the tuner is provided “upon execution of said software application” and “in response to said control signal, the embodiment determines whether an associated security policy of the software application contains a permission for the software application to access the receiver function” (Col 6, Lines 27-31, 39-42). Accordingly, the “security policy” as defined in conjunction with the

parental control criteria determines whether or not particular “software applications” such as those requesting particular programs are capable of accessing receiver functions associated with the tuning of a program. The Ellis et al. reference, however, does not explicitly disclose details pertaining to the composition of the “conditions” in view of the “current state of the receiver”.

The McRae reference discloses a “security policy” of a parental control system wherein “if said security policy contains said permission” to tune to a particular channel, the embodiment further “determines whether said condition of the receiver is met by data indicative of a current state of the receiver”. Accordingly, the “software application is allowed to “access the receiver function if the condition is met” such that receiver may display a particular channel or is “prevented from accessing the receiver function if the condition is not met” wherein the “condition” is “not met” (Col 4, Line 44 – Col 5, Line 3). Accordingly, it would have been obvious to one having ordinary skill in the art at the time of the invention to utilize the parental control teachings of McRae in conjunction with the Ellis for the purposes of providing a parental control means that further utilizes the “condition of the receiver” and further simplifies user programming of such (Col 3, Line 36 – Col 4, Line 41).

Claims 2 and 3 are rejected wherein the “condition indicates a conditional access state of the receiver” comprising an “authorization state” wherein the condition of McRae indicates which programs a viewer is authorized or allowed to view.

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Claims 4-6 are rejected wherein the "condition indicates a user state of the receiver" comprising parental "user preferences" as well as the current "time" [44] of the receiver upon which a viewer is attempting to view a particular program (McRae: Col 9, Lines 56-67).

Claim 8 is rejected wherein the "condition indicates that one of a channel and a group of channels is tuned by the receiver" (McRae: Col 9, Lines 56-67).

Claim 10 is rejected wherein as illustrated in Figure 2A of McRae, the combined references "provide a user interface to allow a user to define, at least in part, the permission of the security policy" wherein the "permission" allows the user to tune to a particular channel at a particular time.

Claim 12 is rejected wherein the "execution command is initiated by a user" in conjunction with the operation/execution of the " software applications" [58/60/62/64] via the remote control device [30a] (Ellis: Col 4, Line 8-18).

Claim 13 is rejected wherein the "permission is associated with a user of the receiver" wherein a parent or user with the appropriate password may define the permissions associated with tuning functions for another user.

Claim 16 is rejected wherein as illustrated in Figure 2A of McRae, the combined references "provide a user interface to allow a user to define, at least in part, the data defining said condition" wherein the "condition" defines the particular time that a viewer is allowed to tune to a particular channel at a particular time.

5. Claims 1-3, 7, 9, 11, 14, 15, and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Thrift et al. (of record), in view of Gong (US Pat No. 6,047,377), and in further view of Ahmad (US Pat No. 5,925,127).

In consideration of claims 1 and 17, the Thrift et al. reference discloses method and means wherein a “digital television receiver” is operable to execute Java applets or “software applications” which are “provided to” the “receiver” and are “executable in response to an execution command” as provided by the user interactions. While the reference makes use of the Java™ API in conjunction with the downloaded applets/showlets, the reference does not explicitly disclose nor preclude that particular usage of a “security policy” or the usage of such in conjunction with the “condition of the receiver”.

The Gong reference discloses a method and apparatus for establishing and maintaining security rules in conjunction such as that utilized by received and executed “software applications” such as those associated with the JAVA™ programming language in order to control television “receiver functions” (Col 9, Lines 36-52; Figure 5; Col 13, Line 59 – Col 15, Line 7). As illustrated in conjunction with Figure 7, the Gong reference discloses a method whereupon an executed software application “provides a control signal for requesting access to the receiver function upon execution of said software application” [754]; and “in response to said control signal”, the receiver comprises “data defining a condition of the receiver under which access to the receiver function by the software application is permitted” [444] and “determines whether an associated security policy of the software application contains a permission for the software application to access the receiver function” [760]. Subsequently, “if the security policy” [444] (Figure 5; Col 15, Line 54 – Col 16, Line 8) “contains said permission” the action is authorized or if the “security policy” [444] does not contain said permission, the “software application” is “prevented from . . . accessing the receiver function” [764/768] (Col 17, Line 33 – Col 19, Line 60). Accordingly, it would

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have been obvious to one having ordinary skill in the art at the time the invention was made to utilize the Gong teachings in conjunction with a “digital television receiver” such as that associated with the Java-enabled television of Thrift et al. for the purpose of providing a mean by which to implement security in conjunction such that downloaded applets are limited in their access to receiver functions in a manner that reduces the effort and in-depth knowledge required to modify permissions established for the sources of code (Gong: Col 1, Line 27 – Col 2, Line 49).

The Gong et al. reference further, suggests that the “security policy” may further utilize multiple “conditions” in conjunction with the particular policy rule such as particular rules corresponding to a particular cable company or to maximum transaction amounts (Col 11, Lines 55-62; Col 16, Lines 47-55), however, it is unclear if these particular “conditions” necessarily relate to the “condition” or “current state of the receiver”.

The Ahmad reference describes a software based pay-per-use software module rental system wherein the embodiment is operable to “provide data defining a condition of the receiver under which access to the receiver function by the software application is permitted” such as a particular duration of time in conjunction with the terms of use of the software and presuming the “security policy” contains such a permission, the embodiment “allows” or “prevents the software application from accessing the receiver function” on the further basis of “data indicative of a current state of the receiver” (Col 2, Line 11 – Col 3, Line 5).

Accordingly, it would have been obvious to one having ordinary skill in the art at the time of the invention to modify the combined references so as to further utilize the run-time or “current state of the receiver” in conjunction with the further determination of the permission

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for the purpose of facilitating a business method wherein software applications may be rented for a set period of time (Ahmad: Col 1, Lines 61-65). For example, when taken in combination the reference would provide a method wherein a user may download an interactive Java™ applet to their television receiver on a rental basis wherein the security policy may defines application resource conditions to access resource functions (Gong et al.) that are only allowed pending the current state of the receiver as defined by the terms and conditions of the rental of the software application.

Claims 2 and 3 are rejected wherein the “condition indicates a conditional access state of the receiver” comprising an “authorization state” wherein the condition locally defines to which receiver functions the software application is “authorized” to perform.

Claim 7 is rejected wherein the “condition is defined, at least in part, by said software application” in so far as the downloaded software application of Ahmad is associated with particular usage criteria..

In consideration of claim 9, the Gong reference discloses that the “software application is downloadable to the receiver” via a network link [120] using a communication interface [118] such as a modem, however the reference does not explicitly disclose nor preclude that the aforementioned network link [120] is necessarily associated with a broadband television network (Col 5, Line 14 – Col 6, Line 9). Accordingly, it would have been obvious to one having ordinary skill in the art at the time of the invention to utilize a “broadband television network” such as that associated with cable modem transmissions for the purpose of providing a means for transmitting/receiving software applications via a high-bandwidth delivery method.

Claim 11 is rejected wherein the “software application comprises a JAVA code” (Gong: Col 11, Lines 10-15).

Claim 14 is rejected wherein the “condition is embedded in code that defines the permission” in conjunction with the policy file [444].

In consideration of claim 15, as aforementioned, the “software application” may be distributed via the Internet (Col 1, Lines 60-65; Col 5, Lines 47-61). The combined references, however, do not explicitly disclose nor preclude the distribution of such applications via “multicasting”. Accordingly, it would have been obvious to one having ordinary skill in the art at the time of the invention so as to distribute the “software applications” via “multicasting” for the purpose of distributing the application software from a single host to a large audience or “receiver population” in a manner that conserves bandwidth and reduces traffic through the simultaneous delivery of the “software application” to multiple “receivers”.

6. Claims 1-3, 7, 9, 11, 14, 15, and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Thrift et al. (of record) in view of Gong (US Pat No. 6,047,377).

In consideration of claims 1 and 17, the Thrift et al. reference discloses method and means wherein a “digital television receiver” is operable to execute Java applets or “software applications” which are “provided to” the “receiver” and are “executable in response to an execution command” as provided by the user interactions. The reference, however, does not explicitly disclose, nor preclude, that the particular application further “provides data defining a condition of the receiver under which access to the receiver function by the software is permitted”. The reference, however, discloses that a particular application may

be related to a particular program being viewed by the user such as a football game.

Accordingly, it would have been obvious to one having ordinary skill in the art at the time the invention was made so as to “provide a condition” associated with the “current state of the receiver” such as whether or not a particular program is being viewed in conjunction with the application for the purpose of ensuring that downloaded software applications particularly customized and/or applicable to a given program are only utilized during the watching of that program in order to minimize user confusion. For example, it is unclear as to why one would be motivated to provide interactive graphics related to a football game if the viewer is watching a talk show on another channel. Furthermore, the addition of information defining the execution condition of the application would advantageously facilitate the distribution of such applications such that the distribution of the applications need not be coupled to the broadcast of the program. For example, by defining the applicable execution “condition” of the application a broadcaster may advantageously distribute the application in advance of the broadcast or during an off-peak time (low-cost) times.

While the reference makes use of the Java™ API in conjunction with the downloaded applets/showlets, the reference does not explicitly disclose nor preclude that particular usage of a “security policy” or the usage of such in conjunction with the “condition of the receiver”. The Gong reference discloses a method and apparatus for establishing and maintaining security rules in conjunction such as that utilized by received and executed “software applications” such as those associated with the JAVA™ programming language in order to control television “receiver functions” (Col 9, Lines 36-52; Figure 5; Col 13, Line 59 – Col 15, Line 7). As illustrated in conjunction with Figure 7, the Gong reference discloses a

method whereupon an executed software application “provides a control signal for requesting access to the receiver function upon execution of said software application” [754]; and “in response to said control signal”, the receiver comprises “data defining a condition of the receiver under which access to the receiver function by the software application is permitted” [444] and “determines whether an associated security policy of the software application contains a permission for the software application to access the receiver function” [760]. Subsequently, “if the security policy” [444] (Figure 5; Col 15, Line 54 – Col 16, Line 8) “contains said permission” the action is authorized or if the “security policy” [444] does not contain said permission, the “software application” is “prevented from . . . accessing the receiver function” [764/768] (Col 17, Line 33 – Col 19, Line 60). Accordingly, it would have been obvious to one having ordinary skill in the art at the time the invention was made to utilize the Gong teachings in conjunction with a “digital television receiver” such as that associated with the Java-enabled television of Thrift et al. for the purpose of providing a mean by which to implement security in conjunction such that downloaded applets are limited in their access to receiver functions in a manner that reduces the effort and in-depth knowledge required to modify permissions established for the sources of code (Gong: Col 1, Line 27 – Col 2, Line 49).

Claims 2 and 3 are rejected wherein the “condition indicates a conditional access state of the receiver” comprising an “authorization state” wherein the condition locally defines to which receiver functions the software application is “authorized” to perform.

Claim 7 is rejected wherein the “condition is defined, at least in part, by said software application” in so far as the downloaded software application, in light of the arguments

presented in conjunction with Thrift et al., defines conditional information associated with ensuring that an application is synchronized or executed in conjunction with its intended program.

In consideration of claim 9, the Gong reference discloses that the “software application is downloadable to the receiver” via a network link [120] using a communication interface [118] such as a modem, however the reference does not explicitly disclose nor preclude that the aforementioned network link [120] is necessarily associated with a broadband television network (Col 5, Line 14 – Col 6, Line 9). Accordingly, it would have been obvious to one having ordinary skill in the art at the time of the invention to utilize a “broadband television network” such as that associated with cable modem transmissions for the purpose of providing a means for transmitting/receiving software applications via a high-bandwidth delivery method.

Claim 11 is rejected wherein the “software application comprises a JAVA code” (Gong: Col 11, Lines 10-15).

Claim 14 is rejected wherein the “condition is embedded in code that defines the permission” in conjunction with the policy file [444].

In consideration of claim 15, as aforementioned, the “software application” may be distributed via the Internet (Col 1, Lines 60-65; Col 5, Lines 47-61). The combined references, however, do not explicitly disclose nor preclude the distribution of such applications via “multicasting”. Accordingly, it would have been obvious to one having ordinary skill in the art at the time of the invention so as to distribute the “software applications” via “multicasting” for the purpose of distributing the application software from

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a single host to a large audience or "receiver population" in a manner that conserves bandwidth and reduces traffic through the simultaneous delivery of the "software application" to multiple "receivers".

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure as follows. Applicant is reminded that in amending in response to a rejection of claims, the patentable novelty must be clearly shown in view of the state of the art disclosed by the references cited and the objections made.

- The Perlman et al. (US Pat No. 5,978,381) reference discloses a method for transmitting high bandwidth network content on a low bandwidth communications channel during off-peak hours.
- The Killian (US Pat No. 6,163,316) reference discloses a JAVA based electronic program guide wherein executed software applications may be synchronized with the currently broadcast program.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Scott Beliveau whose telephone number is 703-305-4907. The examiner can normally be reached on Monday-Friday from 9:00 a.m. - 6:30 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John W. Miller can be reached on 703-305-4795. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

SEB
May 10, 2004



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